

MARK-UP OF AMENDED CLAIMS

- 1. (Amended) An orthopedic implant assembly, comprising
- a) a stabilizing element having an anterior surface, a posterior surface, and at least one bore, the bore having a first opening in the anterior surface, a second opening in the posterior surface smaller than the first opening, and a transverse passageway extending from the first opening to the second opening;
- b) a biased stopping member defining at least in part a reversibly expandable passageway having a smaller diameter configuration and a larger diameter configuration and a posterior stopping surface; and
- c) a securing element having an elongated body, and a head at one end of the body and integral therewith, the head having a maximum diameter greater than the smaller diameter configuration of the passageway defined by the biased stopping member and greater than the second opening in the stabilizing element, so that the head is retained by the posterior stopping surface of the stopping member within the transverse passageway between the biased stopping member and the second opening in the stabilizing element.
- 21. (Original) A method of attaching an orthopedic implant assembly to a bone of a patient, comprising
 - a) positioning a stabilizing element against a surface of the patient's bone, the stabilizing element having an anterior surface, a posterior surface, and

at least one bore, the bore having a first opening in the anterior surface, a second opening in the posterior surface smaller than the first opening, and a transverse passageway extending from the first opening to the second opening, and a biased stopping member within the bore and defining at least in part a reversibly expandable passageway having a smaller diameter configuration and a larger diameter configuration;

- b) providing a securing element having an elongated body, and a head at one end of the body and integral therewith, the head having a maximum diameter greater than the smaller diameter configuration of the passageway defined by the biased stopping member and greater than the second opening in the stabilizing element, so that the head is retained within the transverse passageway between the biased stopping member and the second opening in the stabilizing element;
- c) positioning the body of the securing element in the transverse passageway and posteriorly advancing the head of the securing element within the passageway defined by the biased stopping member and thereby displacing the biased stopping member to form the larger diameter configuration passageway defined thereby; and
- d) attaching the stabilizing element to the bone by advancing the head of the securing element posteriorly of the biased stopping member so that the passageway defined thereby returns to the smaller diameter configuration, to position the head within a posterior section of the transverse passageway between the biased stopping member and the second

opening in the stabilizing element, and to position the body of the securing element within the patient's bone, so that the securing element is attached to the bone and is retained within the. posterior section of the transverse passageway of the stabilizing element.

- 29. (Twice Amended) An orthopedic attachment assembly, comprising:
 - an elongated securing member having an enlarged integral portion
 with a length, a posterior surface and a transverse dimension;
 - b. an attachment member which has an anterior surface and a posterior surface and which has at least one bore extending through the attachment member from the anterior surface to the posterior surface and is configured to receive the securing member, the bore having an anterior bore portion, a posterior bore portion having at least one transverse dimension smaller than the transverse dimension of the enlarged integral portion of the securing member to retain facilitate retention of the enlarged integral portion of the securing member within the posterior bore portion; and
 - c. a stopping member which has a posterior stopping surface, a first configuration within the bore which allows passage of the securing member into the posterior bore portion with the enlarged integral portion of the securing member disposed within the posterior bore portion posterior to the stopping member and a second configuration within the bore which has smaller transverse

dimensions than the first configuration to facilitate retention of the enlarged integral portion of the securing member within the posterior bore portion of the attachment member by the posterior stopping surface of the stopping member [which reduces a transverse configuration of the bore to define at least in part the posterior bore portion and to retain the enlarged integral portion of the securing member within the posterior bore portion of the attachment member].

- 30. (Twice Amended) The attachment assembly of claim 29 wherein the stopping member has
 - [a first] the second configuration of the stopping member [with] has inner
 transverse dimensions that are smaller than transverse dimensions of the
 enlarged integral portion of the securing member to facilitate retention of
 the enlarged integral portion of the securing member within the posterior
 bore portion and
 - [a second] the first configuration of the stopping member [with] has inner transverse dimensions that are greater than transverse dimensions of the enlarged integral portion of the securing member to allow passage of the enlarged integral portion of the securing member into the posterior bore portion.
- 37. (Twice Amended) The attachment assembly of claim 36 wherein the biased stopping member is a collar having at least in part a passageway enlargeable from a first inner dimension to a second inner dimension[, wherein] by the passage of

the enlarged integral portion of the securing member the therethrough [has a maximum dimension greater than the first inner dimension of the collar and less than the second inner dimension of the collar].

52. (Twice Amended) A method of attaching an orthopedic implant assembly to a bone of a patient, comprising

a) providing

a securing member with an elongated body and an enlarged integral portion.

an attachment member which has an anterior surface and a posterior surface and which has at least one bore extending through the attachment member from the anterior surface to the posterior surface and is configured to receive [[a]] the securing member [with an enlarged integral portion], the bore having an anterior bore portion, and a posterior bore portion with at least one transverse dimension smaller than transverse dimensions of the anterior bore portion, and

a stopping member which reduces a transverse configuration of the bore to retain the enlarged integral portion of the securing member within the posterior bore portion of the attachment member;

- b) positioning the attachment member with at least part of the posterior surface thereof against a surface of the patient's bone;
- c) [providing a securing member having an elongated body, and an] the enlarged integral portion [which is at or near one end of the elongated

body and which has] of the securing member having a maximum dimension greater than the smaller transverse dimension of the posterior bore portion to retain the enlarged integral portion of the securing member within the posterior bore portion; and

- d) attaching the securing member to the patient's bone by advancing the securing member within the bore of the attachment member until the enlarged integral portion of the securing member passes the stopping member and is disposed in the posterior bore portion.
- 54. (Twice Amended) An orthopedic implant assembly, comprising:
 - a) a securing element with an elongated body and an enlarged head;
 - b) an attachment member comprising
 - an attachment component which has at least one bore configured to receive [[a]] the securing element [with an enlarged head], the bore having a first bore portion, and a second bore portion having at least one smaller transverse dimension than transverse dimensions of the first bore portion;
 - a stopping surface which reduces a transverse configuration of the first bore portion to retain the enlarged head of the securing element within the bore of the attachment member between the stopping surface and the second bore portion, and a third bore portion between the stopping surface and the second bore portion having a surface configured to conform at least

in part to part of the enlarged head of the securing element received by the bore; and

- [[b]]c) the enlarged head of the securing element [having an elongated body and an enlarged head at one end of the elongated body which has] having a reversibly compressed configuration with transverse dimensions less than the reduced transverse configuration of the first bore portion formed at least in part by the stopping surface and [which has] having an uncompressed configuration with a transverse dimension greater than the reduced transverse configuration of the first bore portion and the second bore portion, so that the head of the securing element is retained within the bore between the stopping surface and the second bore portion in the attachment component.
- 63. (Twice Amended) An orthopedic implant assembly, comprising:
- a. a stabilizing element having an anterior surface, a posterior surface, and at least one bore extending through the stabilizing element from the anterior surface to the posterior surface and the bore having an anterior bore portion and a posterior bore portion which has a posterior opening with a transverse dimension smaller than the transverse dimension of the anterior bore portion;
- b. a securing element which is configured to be slidably disposed within the bore of the stabilizing element and which has an elongated body and an enlarged integral portion; and

- c. a stopping member which is at least partially disposed within the bore of the stabilizing element, which has a posterior stopping surface, a first configuration within the bore [which] allowing passage of the securing element into the posterior bore portion with the enlarged integral portion of the securing member disposed in the posterior bore portion posterior to the stopping member and a second configuration within the bore which has smaller transverse dimensions than the first configuration to facilitate retention of the enlarged integral portion of the securing member within the posterior bore portion of the stabilizing element by the posterior stopping surface of the stopping member and which defines at least in part a reversibly expandable passageway having a first transverse configuration with a transverse dimension that is smaller than the transverse dimension of the anterior bore portion of the bore of the stabilizing element and a second transverse configuration with a transverse dimension larger than the transverse dimension of the first configuration [[:]] [[and]]
- [c. a securing element configured to be slidably disposed within the bore of the stabilizing element having an elongated body and an enlarged integral portion, the enlarged integral portion having a maximum transverse dimension greater than the transverse dimension of the first transverse configuration of the stopping member passageway and greater than a transverse dimension of the posterior opening in the posterior bore portion in the stabilizing element, so that the enlarged integral portion of the securing element is retained between the stopping member and the posterior opening in the posterior bore portion and the elongated body having a maximum transverse dimension less than the posterior opening in the posterior bore portion so

that the securing element is angularly displaceable within the posterior bore portion of the bore.

- 65. (Twice Amended) The assembly of claim 63 wherein the stopping member is biased to the first transverse second configuration.
- 70. (Twice Amended) The assembly of claim 69 wherein the [head of the securing element has a] curved posterior surface of the enlarged integral portion of the securing element has a minimum transverse dimension smaller than a transverse dimension of the passageway of the unexpanded collar, and which is configured to contact an anterior surface of the collar and deflect the collar away from a longitudinal axis of the collar passageway as the enlarged integral portion of the securing element is displaced posteriorly through the collar passageway.
- 89. (Twice Amended) An orthopedic implant assembly which has a stabilizing element having an anterior surface, a posterior surface, and at least one bore extending through the stabilizing element from the anterior surface to the posterior surface with an anterior bore portion, a posterior bore portion having a posterior opening with a transverse dimension smaller than a transverse dimension of the anterior bore portion and which has a securing element having an elongated body and an enlarged integral portion with a maximum transverse dimension greater than a transverse dimension of the posterior opening of the posterior bore portion in the stabilizing element, characterized by:

a resilient radially deflectable member which has a posterior stopping surface, which is configured to engage a surface of the assembly and which has a first configuration that allows the enlarged integral portion of

the securing element to pass into the posterior bore portion and [to retain]

a second configuration that retains the enlarged integral portion of the
securing element within the posterior bore portion by the posterior

stopping surface and prevent the back-out of the securing element
through the bore of the stabilizing element.

- 91. (Twice Amended) The assembly of claim 90 wherein the biased collar has a first configuration and is elastically deformable to [[a]] the second first configuration.
- 92. (Amended) The assembly of claim 91 wherein the second <u>first</u> configuration is an expanded configuration.
- 94. (Twice Amended) An orthopedic implant assembly which has a stabilizing element having an anterior surface, a posterior surface, and at least one bore extending through the stabilizing element from the anterior surface to the posterior surface with an anterior bore portion, a posterior bore portion having a posterior opening with a transverse dimension smaller than a transverse dimension of the anterior bore portion and which has a securing element having an elongated body and an enlarged integral head with a maximum transverse dimension greater than a transverse dimension of the posterior opening of the posterior bore portion in the stabilizing element, characterized by:

a resilient longitudinally deflectable member which is configured to engage a surface of the assembly, which has a posterior stopping surface, which has a first configuration that allows the securing element to pass into the posterior bore portion with the enlarged integral portion of the securing element to be disposed within the

posterior bore portion posterior to the deflectable member [to retain] and a second configuration that retains the enlarged integral head of securing element within the posterior bore portion by the stopping surface and [prevent] prevents the back-out of the securing element through the bore of the stabilizing element.

- 95. (Twice Amended) The orthopedic implant assembly of claim 94 wherein the resilient longitudinally deflectable member is configured to deflect deflects longitudinally when the securing element is advanced posteriorly through the bore of the stabilizing element.
 - 96. (Twice Amended) An orthopedic implant assembly, comprising:
 - a. a stabilizing element having an anterior surface, a posterior surface, and at least one bore extending through the stabilizing element from the anterior surface to the posterior surface with an anterior bore portion which has a transverse dimension, a posterior bore portion which has a posterior opening with a transverse dimension smaller than the transverse dimension of the anterior bore portion; [and]
 - a securing element having an elongated body and an enlarged integral portion; and
 - c. a biased stopping member which has a posterior stopping surface, which is elastically deformable to a first configuration that has a first transverse dimension that allows the securing element to pass into the posterior bore portion with the enlarged integral portion of the securing element disposed posterior to the biased stopping member [extends within the at least one bore of the stabilizing element and reduces at least one transverse

dimension of the bore and which is elastically deformable to] a second configuration that [increases the at least one] has a second transverse dimension smaller than the first transverse dimension so as to retain the enlarged integral portion of the securing element within the posterior bore portion by the stopping surface [reduced by the biased stopping member in the first configuration; and]

- [c. a securing element having an elongated body and an enlarged integral portion which has a maximum transverse dimension greater than the transverse dimension of the bore passageway reduced by the first configuration of the biased stopping member and greater than a transverse dimension of the posterior opening of the posterior bore portion in the stabilizing element, so that the enlarged integral portion of the securing element within the posterior bore portion].
- 97. (Cancelled)
- 98. (Twice Amended) The orthopedic implant assembly of claim [[97]] <u>96</u> wherein the biased stopping member elastically returns from the [second] <u>first</u> configuration back to the [first] <u>second</u> configuration.
- 102. (Twice Amended) The attachment assembly of claim 29, wherein the stopping member is a biased stopping member which reduces a transverse configuration of the anterior bore portion to retain the enlarged integral portion of the securing component member within the posterior bore portion of the attachment member [within the posterior bore portion].
 - 103. (Cancelled)

104. (Twice Amended) The attachment assembly of claim [[103]] 102 wherein the biased stopping member is elastically deformed by the passage of the enlarged integral portion of the securing member.

ing member so as to facilitate angular displacement within the posterior bore portion.

- 115. (New) An orthopedic attachment assembly, comprising:
 - a. an elongated securing member having an enlarged integral portion with a length, a posterior surface and a transverse dimension and a shaft extending from the enlarged integral portion configured to be secured within bone;
 - b. an attachment member which has an anterior surface and a posterior surface and which has at least one bore extending through the attachment member from the anterior surface to the posterior surface and is configured to receive the securing member, the bore having an anterior bore portion, a posterior bore portion having at least one transverse dimension smaller than the transverse dimension of the enlarged integral portion of the securing member to retain the enlarged integral portion of the securing member within the posterior bore portion; and
 - c. a stopping member which has a posterior stopping surface, a first configuration that allows the enlarged integral portion of the securing member to pass into the posterior bore portion and a second configuration that facilitates retention of the enlarged

integral portion of the securing member within the posterior bore portion by the posterior stopping surface and which defines at least in part a length of the posterior bore portion that is longer than the length of the enlarged integral portion of the securing member to allow displacement of the enlarged integral portion of the securing member within the posterior bore portion.

- 116. (New) The orthopedic attachment assembly of claim 115 wherein the securing member has a portion posterior to the integral head that has a transverse dimension smaller than a transverse dimension of an opening in the posterior bore portion to provide angular displacement of the securing member within the posterior bore portion.
- 117. (New) The orthopedic attachment assembly of claim 115 wherein the first configuration of the stopping member has a transverse dimension that is larger than the transverse dimension of the stopping member is the second configuration.
- 118. (New) The orthopedic attachment assembly of claim 116 wherein the enlarged integral portion of the securing member has a maximum transverse dimension which is greater than the second transverse dimension of the stopping member.
- 119. (New) The orthopedic attachment assembly of claim 118 wherein the enlarged integral portion of the securing member has a tapered posterior surface configured to expand the stopping member upon the passage therethrough.